**Problem Description**

Create a turn based game where an investigator must move around a crime scene and uncover clues.

**Input & Output**

|  |  |
| --- | --- |
| **Input** |  |
| *Input Description* | *Mechanism* |
| Number of rows | Command Prompt |
| Number of columns | Command Prompt |
| Number of turns | Command Prompt |
| Number of clues | Command Prompt |
| Choice from menu | Standard Input Stream |

|  |  |
| --- | --- |
| **Output** |  |
| *Output Description* | *Stream(Optional)* |
| Game world | Standard Output Stream |
| Menu Options | Standard Output Stream |
| Conversion error | Standard Error Stream |
| Number of parameters error | Standard Error Stream |

**Data Format**

|  |  |  |
| --- | --- | --- |
| *Identifier* | *Product Type* | *Description* |
| blnContinue | Bool | Used to exit menu |
| chInput | Char | Users choice from menu |
| blnWon | Bool | Used to determine is the player has won |
| CH\_FEATURES | Const char | Array of game characters |
| RADIUS | Const int | Used to locate clues |
| arrWorld | 2D array | Used to create game world |

**Pseudo Code**

void Investigate(array, total rows, total columns)

player row -> - 1

player column -> -1

Call find player function which changes player row and column

Iterate through rows

Iterate through columns

If a clue or potential clue is found

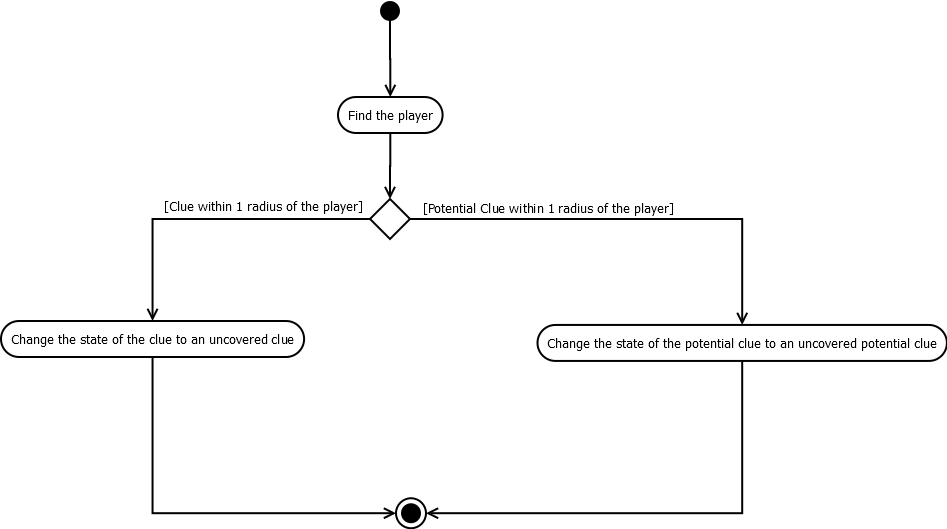
Is the clue within 1 radius of the player

Change form to uncovered clue

Else is the potential clue within one radius of the player

Change form to uncovered potential clue

**UML Activity Diagram**

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